

## 7502 - DSB / SSB AM Receiver



### Key Features:

- Functional Blocks indicated via on board mimics
- Switched Faults
- On board tuner for tuning into the transmitter
- On board transmitting antenna
- On board speaker

The 7502 DSB/SSB AM receiver trainer is part of an analogue communication range which provides all the necessary inputs, test points and connections for experimentation. The 7502 trainer teaches students the basics of DSB/SSB Amplitude modulation and transmission systems through measurement of voltages via the on-board test points.

The 7501 DSB/SSB AM Transmitter is required to work with this unit.

### Experiments

Automatic Gain Control:

1. Double Sideband AM Generation
2. To calculate modulation index of DSB wave by trapezoidal pattern
3. Double Sideband AM Reception
4. Study of Diode Detector

Single Side Band Transmission:

5. Signal Sideband AM Generation
6. Single Sideband AM Reception.
7. Operation of the Automatic Gain Control Circuit (AGC)

Receiver Characteristics (Selectivity, Sensitivity, Fidelity):

8. To plot selectivity curve for radio receiver
9. To plot sensitivity curve for radio receiver
10. To plot fidelity curve for radio receiver

## Specification

Frequency Range	980 KHz to 2060 MHz
Intermediate Freq. (IF)	455 KHz
Input Circuits	1) RF Amplifier 2) Mixer 3) Local Oscillator 4) Beat Frequency Oscillator 5) IF Amplifier 1 6) IF amplifier 2
Tuning	With Variable Capacitor (ganged) Dial marking on board
Receiving media	Telescopic Antenna & cable
Detector Circuits	1) Diode Detector ( For DSB) 2) Product Detector (For SSB)
Audio Output	Amplifier with speaker/ headphone
Automatic Gain control	Switchable
Switched Faults	8
Test points	30
Power	110-220V AC $\pm$ 10 %, 50/60Hz
Dimensions (mm)	D326, H 52, D252
Weight	2Kg (approx.)

## Ordering Information

<b>Model Number:</b>	<b>7502</b>
<i>Consists of:</i>	DSB / SSB AM Receiver Trainer Manual Power Cord Set of patch cables

### Notes.

1. *Specification is subject to change without notice.*
2. *All dimensions are in mm unless otherwise stated*

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